The Space Network TURN-KEY SOLUTIONS

Need flexibility? The Space Network is the answer. They provide a broad suite of low and high-rate, forward and return communications services for a variety of mission phases and orbits. Need flexibility with scheduling? How does a Space Network-provided web client sound? Want IP-based access to your data? Take advantage of the real time/TCP and file transfer services.

Early Mission Design Support
Communications Architecture Design and Development
Requirements Development
Link Budget and Networks Feasibility Analysis
Spectrum Management
Network Integration and End-to-End Testing
Spacecraft Ranging
Network Service Scheduling
Operational Telemetry and Command Support

Ground-based Low-Earth Orbit (All inclinations) Geosynchronous Highly-Elliptical

CRADLE
O GRAVE

EARLY ON-ORBIT NOMINAL

PROVIDING FULL-SERVICE USER SUPPORT

The Space Network RELIABLE COMMUNICATIONS

The Space Network is capable of providing 100% continuous coverage up to 9,000 km. This global network provides nearly 8 million minutes of S-, Ku-, and Ka-band communications services per year with above 99.95% proficiency.

Cross Support

Able to provide forward and return services supplied by different telecommunications frequency bands.

Demand Access

Capability to immediately support continuous or intermittent, conflictfree. S-band return link services 24 hours per day, seven days per week upon demand. Beam forming, demodulation, data distribution, and storage capabilities.

Ranging Services

One- and two-way doppler, two-way ranging, Ka-band single access return one-way doppler

Frequency Band Support

	Service	Current Cap (Mbps)	SGSS Planned Upgrade (Mbps)
1	MAF	.3	.3
1	MAR	3	3
5	SSAF	7	14
5	SSAR	6	24
ŀ	KuSAF	25	250
ŀ	KuSAR	300	600
ŀ	KaSAR	Intermediate Frequency Service	1,200

National Aeronautics and Space Administration

Space Network Project Goddard Space Flight Center, Code 452 Greenbelt. MD 20771

http://spacenetwork.gsfc.nasa.gov

www.nasa.gov

The White Sands Complex is the Space Network's central operations center. Data taken at the Guam Remote Site is piped back to White Sands. **User Spacecraft Ground Segment** User Data Processing Facility The Space Network

